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Watercourse Classification Module for the Timber Harvest Review Component

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Resource Issue

The California Forest Practice Rules (FPRs) define watercourse classification in Section 936.4 and the corresponding protection measures for timber harvesting activities. Class I and II watercourse and lake protection zones (WLPZs) provide protection for water temperature, streambed and flow modification by large woody debris, filtration of organic and inorganic material, upslope stability, bank and channel stabilization, spawning and rearing habitat for salmonids, and vegetation structure diversity for fish and wildlife habitat. This structure includes vertical diversity, migration corridors, nesting habitat, roosting areas and escape cover, nutrient sources, microclimates, snags leaf litter/ground cover and landscape diversity. Class III WLPZs provide less protection for the above.

The correct identification of watercourses is necessary for providing appropriate protection for fish and wildlife resources. During THP preparation, Class I and II watercourses may be misclassified. The most common misclassification occurs when dry Class II watercourses are misclassified as Class IIIs. This error appears to be due to the lack of information regarding biology, hydrology and geomorphology.

Goal

- Provide aquatic resource protection by ensuring watercourses are correctly classified in THPs

Objectives

- Evaluate the classification of watercourses during preharvest inspections (PHI)
- Ensure that the watercourse classification is correct
- Provide the information/explanation to the Registered Professional Foresters (RPFs) during the PHI for educational purposes in the field

Strategic Plan

Watercourses will be evaluated during PHIs for the correct classification. Watercourses will be re-classified as needed and the appropriate WLPZ recommended. The RPF attending the PHI will be provided explanations for the changes in classification and the indicators used.

The majority of the classification errors come from the misclassification of Class II and Class III watercourses. One of the most common problems is the tendency to misclassify dry Class IIs as Class IIIs during the summer months. Class II waters are defined under the FPR's as 1) fish always or seasonally present off-site within 1000 feet downstream and/or 2) aquatic habitat for non-fish aquatic species. Aquatic habitat indicators for Class II watercourses include free water, aquatic plants, water-dependent stages of aquatic insects and the physical condition of the channel and its position in the landscape. Class III watercourses do not have aquatic life present, and are capable of sediment transport to Class I and II waters under normal high water flow conditions.

Class I watercourses also may be misclassified as Class IIs due to a lack of fish distribution data. DFG fisheries biologists/Team staff are available for electrofishing surveys on timber company land in watersheds where information is lacking regarding fish distribution. Range and species composition surveys on private lands will enable better protection of fish species through appropriate watercourse classification.

In addition, training will be provided as proposed in the Watercourse Classification Module for the Timberland Planning Component. RPFs interested in increasing their knowledge on the indicators used for watercourse classification under the FPRs would be invited to attend.

Monitoring

Watercourse classification will be verified during PHIs and random post-harvest inspections. This information will be used to monitor error rate trends.

Adaptive Management

The error rate of watercourse classification in THPs found during PHIs and post-harvest monitoring should indicate whether there is a need for additional training and/or rule modification.

Measures of Success

Success will be measured by the extent to which the following are met:

- Improved communication between the Team and RPFs regarding protection of aquatic resources
- An increase in the correct watercourse classification in THPs